## Appendix A

Declaration of Dr. Jeffery Ryan

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)
Kevin A. Seiling	)
Serial No. 10/001,730	) A COMPOSITION FOR MAKING ) EXTRUDED SHAPES AND A ) METHOD FOR MAKING SUCH ) COMPOSITION
Filed: November 2, 2001	
Art Unit: 1732	)
Patent Examiner: Kuhns, Allan R.	)
Our Ref: 01-180	}
Assistant Commissioner for Patents Washington, DC 20231	October 12, 2007

## DECLARATION OF DR. JEFFERY RYAN

NOW COMES Dr. Jeffery Ryan, an individual, who resides in Darlington, County Durham, England, and who declares that the following facts are true, complete and correct:

- 1. I am the Technical Director at Dugdale PLC, a company that is located in Valley Mill, Sowerby Bridge, West Yorkshire, England ("Dugdale"). Dugdale sells a comprehensive range of both rigid and flexible PVC compounds. I have been Technical Director at Dugdale for approximately one and one-half years. Prior to that time, I was employed for approximately thirteen years at Hydro Polymers Ltd., a manufacturer of PVC resins and compounds which is located in Newton Aycliffe, County Durham, UK ("Hydro Polymers"). At Hydro Polymers, I was responsible for foam compounds.
- 2. In 1992, I earned a PhD from Bradford University in reaction injection molding.
- 3. As a result of my education and work experience, I am knowledgeable regarding thermoplastic compounding, especially polyvinyl chloride compounding. I have also become knowledgeable regarding the manufacture of polyvinyl chloride moldings and profiles through various extrusion and injection molding processes.

- I have read U.S. Patent Application Serial No. 10/001,730 which is entitled "A Composition for Making Extruded Shapes and a Method for Making Such Composition" (herein "the '730 Application"). The '730 Application describes a composition wherein polyvinyl chloride with glass fibers is extruded to form a closed cell polyvinyl chloride compound wherein the glass fibers are in the amount of 1% to 18% by weight of the composition (herein "the '730 composition").
- I have also read U.S. Patent 6,623,838 to Nomura (herein "Nomura"). Nomura describes an expansion molding process wherein a thermoplastic material is injected into a mold having an expandable mold cavity. The mold cavity is expanded as the molded part is formed to create a hollow cavity in the molded part.
- 6. In Nomura, the thermoplastic material includes a blowing agent that causes the thermoplastic material to foam as the molded part is being formed. Also in Nomura, while the molded part is being formed, a gas is introduced to the expanding mold cavity. Nomura states that the process results in an open cell structure of the molding. (See Nomura, Column 8, lines 64-67).
- 7. I have also read U.S. Patent 6,062,624 to Crabtree (herein "Crabtree"). Crabtree describes a thermoplastic material that is said to be useful as an acoustic baffle. Crabtree states in Column 3, lines 52-53 that "The foam material may be open or closed cell." As one skilled in the art, to me this means that the thermoplastic material in Crabtree is foamed in an uncontrolled process such that some of the cells may be closed and some of the cells may be open.
- 8. Crabtree does not teach how to control the process therein described so as to selectively create an acoustic baffle with closed cells in the thermoplastic material. As one skilled in the art, it is not apparent to me how Crabtree can be used to modify Nomura so that Nomura could produce a closed cell polyvinyl chloride compound with glass fibers. Crabtree does not suggest what modifications could be made to the Nomura process so that it might produce a closed cell polyvinyl chloride compound having glass fibers.

- 9. As one skilled in the art who has read Nomura and Crabtree, I conclude that the expansion cavity mold process described in Nomura is said to produce an open cell thermoplastic material. I find no teaching in Crabtree that would lead one skilled in the art to produce a closed cell polyvinyl chloride as described in the '730 Application. Furthermore, I have found nothing in either Nomura or Crabtree that would suggest to one skilled in the art that Crabtree could be combined with Nomura or how such a combination could be used to modify Nomura and cause Nomura to produce a fully closed cell thermoplastic material.
- 10. Based on my years of experience in the development of polyvinyl chloride compounds, in November 2001 when the '730 Application was filed it would not have been obvious to one normally skilled in the art to modify Nomura in accordance with any teaching of Crabtree. Furthermore, it would not have been obvious to one skilled in the art as to how a combination of Nomura and Crabtree would result in a polyvinyl compound with closed cells as described in the '730 Application.

Dr. Jeffery Ryan

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Further I say not.